REMARKS

Claims 1-32 are pending. Claims 1, 2 and 27 are currently amended to correct minor spelling errors. In view of the following, all of the claims are in condition for allowance.

Rejection of claims 1-32 Under §103(a) as being unpatentable over Tuttle et al. (US 6,108,151) in view of Ruddy et al. (US 6,295,176)

Claim 1

Claim 1 recites a servo wedge located at the beginning of a disk sector and operable without a zero frequency field to identify the sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector.

For example, referring, *e.g.*, to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, a servo wedge 22 includes a preamble 74, a servo synchronization mark (SSM) 76, head-location identifier 78 and bursts 84a-84n. A servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74, searches for the SSM 76 within a predetermined time window, and then recovers the location identifier 78 which a head-position circuit 214 uses to determine an initial position of a read-write head 32. In this way, the direct detection of a first servo wedge 22 provides both an initial head position on disk spin-up and a head position during a read or write operation. As a result, the disk's data-storage capacity can be increased by reducing the number of, or altogether eliminating, spin-up servo wedges.

Tuttle et al. '151, on the other hand, does not disclose, teach or suggest a servo wedge operable without a zero frequency field to identify a disk sector in conjunction

with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector. Tuttle et al. '151, at, *e.g.*, FIG. 3 and col. 15, lines 13-30 discloses a disk drive system that uses a dc erase field during spin-up to mark the servo data wedge location, and thereafter the servo wedge and wedge sector data are read. Specifically, Tuttle et al. cannot locate the servo wedge during an initial positioning of a read-write head without first detecting a predetermined "special seqence of bits (normally comprised of a long sequence of "0" bits)" (Col. 15, Lines 23-25). Such a "0" bit sequence is also known in the art as a dc erase field or sometimes called a transitionless or zero-frequency field. The quoted passage (Col. 7, Lines 24-65) relied upon by the Examiner in rejecting claim 1 is simply a portion of the BRIEF DESCRIPTION OF THE DRAWINGS. After reviewing Tuttle et al. '151 in its entirety, Applicants' attorney is unable find any mention of a servo wedge operable without a zero frequency field to identify a disk sector in both an initial positioning of a read-write head and during a read or write operation.

Similarly, Reddy et al. '176 does not disclose, teach or suggest a servo wedge operable without a zero frequency field to identify a disk sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector. Reddy et al. '176, at, *e.g.*, FIG. 15 and col. 13, line 32 – col. 14, line 48 simply discloses an embedded servo system that uses a headerless track sector format. A header is part of a data sector and simply provides information concerning the data stored in the sector, as well as defect and defect management information (Col. 1, Lines 45-58, and throughout the disclosure). Reddy et al. '176 modifies a typical track sector format by eliminating the headers and storing the sector defect

management data in hardware. However, this has nothing to do with servo wedges, and more specifically, this has nothing to do with servo wedges that are operable without a zero frequency field to identify a disk sector in both an initial positioning of a read-write head and during a read or write operation. Headers are a type of data that can be continually changed depending on the data in the corresponding data sector. Servo wedges, on the other hand, are permanent location devices that are manufactured into the disk. Therefore, because the teachings of Tuttle et al. '151 do not include a servo wedge as recited in claim 1, modifying the teachings of Tuttle et al. '151 by incorporating the teachings of Reddy et al. '176 (headerless track sector) would not satisfy the limitations of claim 1.

Claims 3, 5, 8, 14, 20, 25, 29 and 32

Claims 3, 5, 8, 14, 20, 25, 29 and 32 are patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claims 2, 4, 6-7, 9-13, 15-19, 21-24, 26-28 and 30-31

Claims 2, 4, 6-7, 9-13, 15-19, 21-24, 26-28 and 30-31 are patentable by virtue of their respective dependencies from independent claims 1, 3, 5, 8, 14, 20, 25 and 29.

Conclusion

In light of the foregoing, claims 1-32, including amended claims 1, 2 and 27, are in condition for allowance, which is respectfully requested.

In the event additional fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If the Examiner believes that a phone interview would be helpful, then it is respectfully requested that Applicants' attorney, Bryan Santarelli be contacted at (425) 455-5575.

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Respectfully submitted,

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